

(C) WPI / DERWENT
 AN - 2001-538891 [60]
 AP - JP19990317904 19991109
 CPY - TOKE
 DC - E36 H04 J01 J04 X16
 DR - 1066-P 1066-U 1532-P 1532-U
 FS - CPI;EPI
 IC - C01B3/38 ; C01B3/56 ; H01M8/06
 MC - E11-Q01 E11-Q02 E31-A02 E31-N05C H04-E06 H04-F02E J04-E02 N06
 - X16-C17
 M3 - [01] C101 C550 C810 M411 M424 M720 M740 M904 M905 N105 N164 N209 N224
 N262 N441 N513 N514 N515 Q431 Q436; R01532-K R01532-P; 1532-P 1532-U
 [02] C106 C108 C530 C730 C800 C801 C802 C803 C805 C807 M411 M424 M720
 M740 M750 M904 M905 M910 N105 N164 N209 N224 N262 N309 N343 N441 N513
 N514 N515 Q431 Q436; R01066-K R01066-P R01066-X; 1066-P 1066-U
 PA - (TOKE) TOSHIBA KK
 PN - JP2001139304 A 20010522 DW200160 C01B3/38 005pp
 PR - JP19990317904 19991109
 XA - C2001-160633
 XIC - C01B-003/38 ; C01B-003/56 ; H01M-008/06
 XP - N2001-400482
 AB - JP2001139304 NOVELTY - The modifier has sealed part filled with modification catalyst layers which convert heating gas (I) containing methane and water vapor to hydrogen rich gas, heating tube made of porous ceramic substance of zirconite adjoining partitions divided by catalyst layers for heating gas (I). Header in sealed part supplies heat carrier to heating tube and another header and outlet collects carbon dioxide.
 - DETAILED DESCRIPTION - The modifier has a inlet part which supplies heating gas containing mixture of methane and water vapor to the partitions divided by the modification catalyst layer filled in sealed part. The heating tube made of porous ceramic substance of zirconite, through which heat carrier passes, for permeating only carbon dioxide, is arranged to adjoining partition. The header is provided in sealed part and circulates a heat carrier to each heating tube. The heating gas is heated in the heating tube in the presence of carrier and catalyst converts heating gas into a hydrogen-rich gas. Another header provided in sealed part and outlet part collect obtained carbon dioxide.
 - USE - For formation of hydrogen rich gas from methane and water vapor and for collection of carbon dioxide separately.
 - ADVANTAGE - Since carbon dioxide is not released and is collected separately by modifier, global warming caused by carbon dioxide released into atmosphere is reduced. The modifier sets the temperature of the waste gas as heating source ejected from gas turbines to 600 deg. C.
 - (Dwg.0/5)
 CN - R01532-K R01532-P R01066-K R01066-P R01066-X
 DRL - 1532-P 1532-U 1066-P 1066-U
 IW - FUEL MODIFIED CATALYST LAYER CONVERT HEAT GAS METHANE WATER HYDROGEN RICH GAS POROUS CERAMIC HEAT TUBE ADJOIN LAYER HEADER OUTLET PART COLLECT CARBON
 IKW - FUEL MODIFIED CATALYST LAYER CONVERT HEAT GAS METHANE WATER HYDROGEN RICH GAS POROUS CERAMIC HEAT TUBE ADJOIN LAYER HEADER OUTLET PART COLLECT CARBON
 NC - 001
 OPD - 1999-11-09
 ORD - 2001-05-22
 PAW - (TOKE) TOSHIBA KK
 TI - Fuel modifier has catalyst layers for converting heating gas of

PRO 2001

P... 1-2 = 2